Chapter 9:

Education

People need to know the functions and benefits that wetlands provide before they can appreciate and support wetland conservation. Because most people do not know how wetlands function within the environment or how wetlands benefit their quality of life, education is a simple, yet critical component of any wetland conservation endeavor. Community members who understand the diversity and complexity of wetlands are more likely to support wetland conservation and legal protection, to address sources of wetland pollution, and to participate in wetland projects. Community education can be incorporated into any of the wetland projects your focus area team decides to pursue. You can use virtually any ongoing wetland conservation or management practice as a demonstration project by offering workshops or by publishing the techniques and results of the project in detail. Monitoring activities also may be used to educate the public through volunteer training, the involvement of schools, or publishing monitoring results in a newsletter or through the media.

Be Effective and Successful

Helping people to learn about wetlands can be done in an unlimited number of ways. But resist the temptation to "just do something–anything" or to do only those things that sound like fun. If you want to be effective and successful, you need to say the right thing to the right people at the right time in the right way. It's easy for something in that process to go wrong, unless you think it all through *before* you act. When determining what method of education to use, always follow this process:

- Define your goals and objectives.
- Identify your target audience(s).
- Develop the appropriate message(s) for the audience(s).
- Determine the best medium for conveying each message to its appropriate audience.
- Distribute the message(s).
- Evaluate the results.

When you are defining your goals and objectives, be specific. If "educating the local community" is your goal, you need to narrow it down with specific objectives. Ask yourself who the "local community" is–what specific groups in the area do you want to affect? Once you have a list of groups, go through each group one at a time, asking what key message *that* group needs to hear. You may need to do some research to learn more about certain groups before you can determine what the most effective message might be. Don't make assumptions, but find out where people are coming from. What is their perspective? Why do they think certain things or feel a certain way? Once you have this information, you can be much more effective at developing the message *they* need to hear in order to support (or *not* oppose) your local wetland conservation effort.

After you have developed each specific message, decide how it will best be conveyed to the particular audience for which it is intended. For example, you will have more success reaching children of certain ages by going through their schools or libraries than you would by using radio or newspapers. And a flyer inserted within a local birding group's newsletter may be the perfect way to inform such fellow environmentalists about a wetland issue they can help with. Be sure to evaluate your efforts. If you asked a birding group for help on a work day in your wetland, did anyone from that group show up? If not, consider contacting someone in the group and asking why. Perhaps the message did not get out, or maybe there was a conflicting event that kept people from attending. Try not to assume anything. If you can determine which of your communication efforts are the most effective and why, then you can be even more effective in your future efforts.

Ideas Spawn Ideas

Using the above process is critical to successful outreach efforts. Consider going through the process annually, to make certain your efforts are as effective as possible. Creativity is also important. Involve as many of your stakeholders in the process as possible. The following list contains potential activities you might use if they fit your needs as determined by the above process. You can modify these activities as needed, or they may help you to think of additional ways to "get the word out" about wetlands.

- Sponsor community forums, workshops, and presentations about the wetland.

- Create a display about the wetland with pictures of your group's projects and the wetland's habitat and animals. Displays should grab people's attention immediately. Written messages should be clear and concise, and pictures should dominate the display. Pictures of wetland animals are good attention-getters. The best way for a display to attract attention is to be interactive. This may mean having a person standing with the display to answer questions or having a wetland game or demonstration included in the display.

- A fun game can be created by cutting a series of holes in a display board with boxes attached that contain objects found in wetlands. Some examples are a cattail, a turtle shell, a feather, wet soil or a sponge, and a mussel shell. Kids can stick their hands into the holes and guess what are the wetland objects inside. The display board may present clues to help identify the objects. Answers may be hidden behind lift up panels. If a person cannot be stationed with the display, you can leave brochures in a holder on the display for visitors to take.

- Another fun activity to add to a display is to bring a wetland with you. Create a small wetland in a plastic kiddie pool with mucky soil, water and potted wetland plants. Add turtles, salamanders, and other wetland creatures. Or, use a watershed model (aluminum tray with a sloping layer of dirt to represent a watershed) with wetlands (sponges), pollutants (food coloring), and rain (spray bottle) to demonstrate how wetlands can filter water.

- Document wetland scenes and wildlife. Enlist the help of a hobby or professional photographer. Display the photos with educational captions at local galleries and restaurants. The chamber of commerce, city hall, the local library, schools, and other public buildings are also good places to display wetland photos.

- Create a wetland coloring book with the help of a local artist.

- Develop an educational wetland video that can be aired on community access television and viewed by various groups.

- Turn the wetland into an educational center. The best way to educate people about the wetland and grab their attention is to take them into the wetland. The following are examples of ways the wetland itself may be used as an educational center:

  – Lead field trips to the wetland for community clubs such as 4-H clubs and garden clubs. Ask a local wetland scientist to help lead the tour. You may want to ask the scientist to train volunteers to become wetland naturalists who lead future tours. (See more on field trips later in this chapter.)

  – Make signs describing the project, its purpose, and how to contact project sponsors. Hold a contest for local artists to design the sign.

  – Place informational signs in wetland areas used by the public. Placards identifying plants or giving general wetland information can be installed along a trail. You also can put up signs such as "Quiet, Nesting Bird Area" or "Toad Crossing" to educate people about the wildlife that use the wetland.

– Provide access for community members to visit the wetland without damaging plants or disturbing wildlife. Install wildlife viewing blinds, boardwalks, and viewing platforms. Work with landscape architects and wetland scientists to design a viewing area that blends with the local environment and does not damage the wetland.

– If you already have a nature center with wetlands in your community, your group may want to lead tours or start monitoring projects within the nature center and invite community participation. If there is no nature center in your community, raise money and community support to build an educational nature center adjacent to the wetland. Sponsor educational programs through the center.

– Use wetland monitoring techniques to educate the public. Take local groups such as Boy and Girl Scouts, Jaycees, school groups, and other interested citizens to the wetland and train them in monitoring techniques.

Using History to Help Conserve Wetlands

If there are unique or interesting historical facts about your focus area, be sure to make them known and use them to help you in your conservation efforts. The historical preservation aspect can bring a whole new set of stakeholders and supporters to your focus area team. Conduct research at local libraries, archives, and at the county recorder's office. Learn about the history of the area, particularly concerning Native Americans, pioneer settlement, wetland drainage efforts, etc.

The Limberlost Experience – Making History Work For Wetlands

Limberlost Pilot Focus Area Coordinator Ken Brunswick had a personal interest in the history of the Limberlost Swamp and its effects on the local area, and he spent years researching this local history. Following are the topics he has found particularly helpful in his focus area efforts.

Famous Local People - The Limberlost area was the home of internationally-known author, Gene Stratton-Porter. The Limberlost Swamp was a major source of her inspiration, and it is woven into many of her writings, photographs, and drawings. Her home in Geneva is a state historic site, and the notoriety and visitation it receives has tremendous positive benefits for the Limberlost Pilot Focus Area and our efforts to restore some of the wetlands she held dear. Other famous people from this area include Johnnie Appleseed (John Chapman), Limber Jim, and Jessie Gray. We have developed "impersonators" of some of these people who go into the schools and present wetland and historical information in a fun, story-telling manner.

Geology of the Limberlost - Geology is extremely important to the elevation and topography of the area, as well as to the original development of the wetland. Understanding these aspects can help you describe the benefits that wetlands provide, such as flood relief, groundwater recharge, etc. You can learn a lot about geology from U.S. Geological Service maps, soil maps, and aerial photographs. The Geology Department at a local university can also be a big help.

Native Americans - Every wetland has a history. One or more Native American cultures have probably visited or lived near your wetland before white settlement. Wetlands provided plant and animal food for these cultures, and you can build fascinating school programs around these historical aspects. The Native American history of the Limberlost area is described in great detail in libraries (we cross-referenced the information with all the libraries in each of our counties). Ball State University's Bracken Library was also very useful.

Pioneer Settlement - Some of the local wetlands survived nearly 200 years of drainage efforts. Find out why, and share it with your visitors. Again, local libraries and Ball State University's Bracken Library had a wealth of information. Local elderly residents also provided excellent verbal history.

Drainage and Crop Loss - The draining of wetlands is a major historical event in many areas where wetlands used to dominate the landscape. In our case, the draining of the Limberlost is what led our most famous resident, Gene Stratton-Porter, to move away from the area. Current crop losses also provide economic reasons to encourage restorations. Libraries, the U.S. Fish and Wildlife Service, and the Natural Resources Conservation Service can provide a lot of information. You should also check with elderly residents and local farmers.

Restoration Efforts - The idea of restoring the Limberlost was not new. Others had tried but failed to accomplish their goal. If anyone who previously tried to restore your project wetland is still around, speak with them early in the process. They can show you pitfalls to avoid.

Field Days and Demonstrations

Field days and demonstrations are great educational tools. Going on a wetlands field day is a fun break away from the "daily grind" for most people. Once people attend, they will not only have fun enjoying the outdoors, but they will learn about wetlands and they may be inspired to become more involved in your wetlands project. Advertise these events in local newspapers, on local radio stations, and distribute fliers in the area. The participants of a field day will come from all walks of life. They may be factory workers leading a troop of scouts, teachers looking for more information for their classes, or birders, farmers, or executives. Expect and be prepared for people from all walks of life.

The Limberlost Experience – Field Days

Limberlost Pilot Focus Area Coordinator Ken Brunswick speaks of the success his focus area has had with field days.

Field days are like pieces of a puzzle–each piece adds a glimpse of the big picture. Together, the pieces tell the story of the wetland's benefits and values. Field days can have many benefits. The Limberlost Pilot Focus Area has received numerous donations toward our wetlands restoration program because of field days. Several participants from our early field days are now on our Board of Directors. Others want to help conduct future events. All kinds of rumors and myths about wetlands are dispelled during field days–this is one of the biggest benefits.

Following are examples of field days we have held at the Limberlost Pilot Focus Area:

Aquatic Insect Study of Wetlands - Participants break into small groups. The groups use D-nets to collect aquatic insects from different areas of a wetland. Using field guides, the groups discover what species live in the different areas of the wetland.

Native Vegetation; Warm Season Grasses - Participants use field guides to determine the species of grasses and wildflowers growing in a local prairie. The leader helps the group answer the questions: Where are the different grasses growing? Why are they different from the grass in your lawn? Why are they different from a farmer's hay field? Which plants are in the wetland areas of the prairie? Why?

Natural Succession - Participants are taken to an upland area that is undergoing natural succession, followed by a restored marsh wetland. At each location, the leader helps the group answer the questions: What is happening to this area? Why does the marsh have different species than the upland?

Where Does the Wetland Begin? Participants are taken to the border of a marsh wetland. Participants are asked to stand at the location where they think the wetland begins. The leader joins the participant standing nearest to the division between the wetland and the upland, and then describes the three wetland criteria–hydrology, soil, and plants.

How to Restore a Wetland - Participants use a tile probe to discover where subsurface drain tiles are located. The leader knows their location and history, and helps the group answer the questions: Why are the tiles found at that particular location? What would it take to break the tile and restore the water to the wetland?

Is It a Wetland? Participants are taken on a hike of the trails of the Loblolly Marsh Wetland Preserve. Each participant checks the "yes/no" boxes at each stop along the way. The leader then interprets the wetland, upland, and intermediate areas according to the three wetland criteria (soils, plants, hydrology).

Gnome Hunt! Great for preschool children. The leader explains to the children that gnomes are elf-like creatures that disguise their footprints as birds' and other animals' footprints, and hang their hats on the hook of the bellflower. The children then search for signs of gnomes that the leader interprets.

Self-guided Tour of the Limberlost - Participants use a map of the area that includes different points of interest. This map describes the wetlands that have been restored, the pristine wetlands, and other features.

Guided Tour of the Limberlost - The leader rents a van for the day and takes participants on a 1- to 1.5-hour tour. Participants are shown geology, historical areas, farm fields with drainage problems, and restored wetlands.

Teacher Materials for Wetlands

There are several excellent curricula and other resources concerning wetlands available for educators. Among the most widely used are WOW! (The Wonders of Wetlands), Project WET (Water Education for Teachers), and Project WILD.

WOW! is an educators guide for wetland learning (published jointly by Environmental Concern Inc. and The Watercourse). WOW! includes background information about wetlands for educators, an interdisciplinary curriculum guide for grade levels K-12, and a list of other educational resources. The book contains more than 50 indoor and outdoor learning activities. Environmental Concern Inc. also offers workshops for teachers. For more information, call 410-745-9620.

Project WET is a curriculum for grade levels K-12 that teaches awareness, problem solving, and stewardship of water resources and is available through workshops for teachers. Workshop participants receive certification as Project WET educators and a copy of the 518-page Project WET Curriculum and Activity Guide. The hands-on, water-related activities described in the guide include large and small group learning, laboratory investigations, local and global topics, and involvement in community service projects. Several activities focus specifically on wetlands. Call Indiana's Project WET Coordinator at 317-562-0788.

Project WILD is a supplementary environmental/conservation education program emphasizing wildlife. The program's innovative, hands-on activities are designed for grade levels K-12. Materials are correlated with and easily integrated into all subject areas or programs. Project WILD assists learners of any age in developing the awareness, knowledge, skills, and commitment to make informed decisions and act responsibly concerning wildlife and the environment. Project WILD has received numerous awards and endorsements on local, national, and international levels. Call Indiana's Project WILD Coordinator at 317-549-0348.

The Limberlost Experience – School Programs

The Limberlost Pilot Focus Area Coordinator explains their school programs:

Staff from the Limberlost State Historic Site–former home of famous author Gene Stratton-Porter–made most of the initial contacts with local schools. They had been working with schools previously using Gene Stratton-Porter's writings. School children visiting the cabin frequently asked them "Where's the swamp?" Wetland restoration and conservation was a natural extension of the work they were already doing with schools.

In 1996, we purchased the 428-acre area that we call the Loblolly Marsh Wetland Preserve (Loblolly was the Native American name for the Limberlost Area). This area includes marsh, wet meadow, sedge meadow, and two potholes, and thus makes an excellent location for school programs and educational field days. We currently conduct

programs for approximately 40 school groups each year that tour either the log cabin, the Loblolly Marsh, or both, and this number has continued to grow from year to year.

The U.S. Fish and Wildlife Service (USFWS) has conducted several of its Integrated Environmental Curriculum (IEC) field training seminars at the Limberlost State Historic Site in Geneva. The IEC is an interdisciplinary approach to environmental education, sponsored by the USFWS, the Indianapolis Zoo, and the Sierra Club Wetlands Project. Its wetland-based thematic curriculum is the first of several proposed components of the project. It includes classroom and field activities, references, a wetlands field site list, and other supporting material. The field training days at the Limberlost led to additional contacts with teachers from around the state.

One of our best school-related efforts is the program and display booth we operate at the Hoosier Association of Science Teachers, Inc. (HASTI) conference in Indianapolis. In 1999, 75 teachers attended the program, and numerous others visited the booth. Overall, approximately 2,400 teachers from throughout Indiana were present at this two-day seminar, and we received numerous requests for a program like this at their schools.

We continue to increase the number of school programs we conduct each year. Most teachers want an overview of wetlands in class, followed by a field trip to the wetlands. Once the teachers and students "get their feet wet" with an aquatic insect study, the program sells itself.

Presentations to School Groups

Educating children about wetlands is very important. If they learn the value of wetlands at a young age, they will likely be supportive of wetland conservation throughout their lives. The methods used to educate children depends on both their age and their general background. For instance, very young children who cannot conceptually understand even the most basic information will still benefit just by experiencing a wetland. Plan a field trip and let the youngsters have a ball!

Presentations can be quite effective at driving home certain facts and helping older children understand concepts. But presentations can also be boring and ineffective. What makes a successful presentation? Interaction, make-believe, and humor are all excellent tools for engaging children in your topic. Involving the students makes them feel important and holds their attention. Role-playing and other forms of make-believe give children a form of escape or fantasy that they enjoy. Laughing makes them feel good, and like most of us, they're very interested in having fun. Most importantly, the presenter must have enthusiasm for the topic. If you can incorporate these tools into your presentation, you're well on your way to successfully influencing the children in your audience.

"Limber Jim" Returns From The Swamp!

Ken Brunswick of the Limberlost Pilot Focus Area has developed a very successful presentation he frequently gives to school groups and other audiences. Here, Ken describes the basic elements of his presentation and why it is always so well received.

> I have an old hat and tattered clothes that I wear when I impersonate 'Limber Jim,' the pioneer youth who named the area *Limberlost*. It's much easier to keep people interested when you role-play and actually become a character they enjoy. If the audience can also play some of the characters, they not only stay interested, but they really have fun. As Limber Jim, I can talk about the days before the Limberlost was drained. The audience gets involved as bears, wolves, and Bobcats demonstrating the types of animals that lived in the Limberlost years ago. People from the audience who have cats get to play the bobcat; the person with the biggest dog plays the wolf. I involve the others with various other interactive parts of the story. Then I tell the Legend of the Limberlost with everyone participating. After we have finished the story, I show slides of the Limberlost wetlands today, and I help the kids understand how important wetlands are to us all. Limber Jim's colorful character is quite an asset for the Limberlost Swamp!

Dear Mr. Brunswick,

I liked the swamp alot it was my favorite. It was fun diging through muck looking for bugs and other stuff. I never thought that Dragon-fly reamf would look like that it looks sick.

Thanks alot for showing us the swamp it was neat

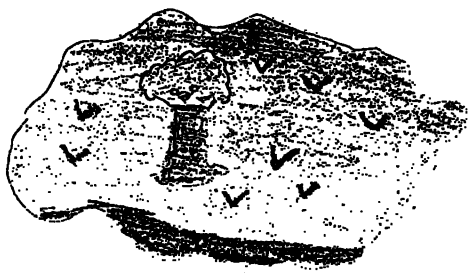
Candace Thomas

Dear Mr. Brunswick,

Thank you for the trip to the swamp I never knew that area was a swamp area. I didn't know there was swamp area in Adams County. A D-net is neat. I don't know much about nets. There is soo much life in just a pond. I hope in a few years that area will be a swamp so the Great Blue Heron will quadruple its number.

Thank alot,
Justin Wolpert

Thank You Mr. Brunswick



Developing Relationships with Local Reporters

The local media are a very important asset when any endeavor needs public support (or needs to *prevent* public opposition). Establishing a relationship with a local reporter gives you the opportunity to convey good wetlands information to the local community. Anyone can contact a local reporter and suggest a possible story, and stories about wetlands have good potential of being covered because wetlands tend to be visually appealing and they frequently have wildlife in them. Wetlands also make a unique story–something you don't hear about very often.

If you can establish good relationships with one or more reporters by pitching them good story ideas and helping them get the best story possible with the least amount of effort, they may start coming to you when they are looking for stories. They may contact you periodically to see if there's anything going on in your area that they could do a story on. And when you contact them with a story idea, they are more likely to cover the story because they know they can rely on you to have the facts, etc. (you're a "known quantity"). This kind of relationship is obviously a great asset to the conservation of your local wetlands, because you can keep the issue in front of the public, and you can get better coverage of the aspects that are important to you.

To begin this process, generate a list of potential stories. Next, call a local newspaper, radio, and/or television station and ask if you can speak with a reporter about a possible story idea. Depending on how large the media outlet is, they may have reporters who cover the whole gamut of topics, or they may have reporters who are assigned to specific topics (someone may cover health/medicine, someone else may cover environment/nature, etc). If the person you speak with is not interested, do not give up! Just try a different newspaper/radio/TV station. If no one is interested at that time, speak with them again in a couple of weeks or months, and keep offering periodically. A rejection doesn't necessarily mean the story idea wasn't "good enough"–it largely depends on what other stories are breaking on that day. A little persistence will go a long way. If you get a reporter or news crew to accept your offer and come to your site, do everything you can to make it a good experience for them. Provide a boat or waders to get them out into the wetland, if that is important for the story. Provide drinks and insect repellent if the situation warrants. Have a typewritten sheet of background information on hand to give the crew when they leave. This will help ensure that they use correct facts and figures in the story, and it makes their job easier. Once someone covers one of your story ideas, they will have a better idea of what you can offer, and they will likely be more open to your ideas in the future.

The Limberlost Experience – Getting The Word Out

There are many reasons to seek publicity for your focus area, and in most cases, you should try to get the media involved as much as possible. But just as there's an exception to every rule, there can also be good reasons *not* to publicize. Limberlost Pilot Focus Area Coordinator Ken Brunswick explains.

> In the early days of our project, we did not want lots of publicity because one of the landowners we were buying land from made it clear he did not want to be involved in any publicity. It is important to respect the wishes of those from whom you are buying land.
>
> Once that property had been purchased, the project was already up and running and reporters were coming to us to get stories. Most of the local reporters wanted to be kept abreast of our progress, or they wanted to be involved in some way. Through relationships with reporters, we've had numerous articles printed in several newspapers:
>
Fort Wayne News Sentinel	*Fort Wayne Journal Gazette*	*Berne Tri-weekly News*
Indianapolis Star	*Ball State Newspaper*	*Decatur Daily Democrat*
REMC Electric Consumer	*The Commercial Review*	*The Daily Standard (Celina, OH)*
>
> One reason for our popularity with reporters is that the name *Limberlost* is recognized all over the state of Indiana. By connecting the historical aspects of Gene Stratton-Porter with our wetland restoration work, we have had success. Be sure to research deeply into your local history for something that can draw additional attention to your wetlands project.

Writing Letters to the Editor

Surveys show that the front page of a newspaper is the most read section of the paper. But, after looking over the front page, most readers turn to the "letters to the editor" section. By submitting a good letter to the editor, you can get your message to a rather large audience. Here are some tips for getting your letter printed (but even if your first attempt is turned down, keep trying!).

- Review letters printed in previous issues of the newspaper you are targeting. This will give you an idea of what kinds of letters the newspaper tends to print (writing style, format, perhaps topic–is the paper/editor especially fond of certain issues?). Call to find out if there are specific requirements or a specific process you must follow (e.g., some papers require that you sign your letter). As a general rule, letters should be double-spaced and either typed or written legibly. You can send your letter by regular mail, but using e-mail or fax makes your letter more timely; editors tend to prefer faxes.
- Review letters and articles from the most recent issues. If something has recently been printed about the topic you want to discuss, your chances of getting printed are much higher. Timely and relevant issues are important to editors news has to be timely. Editors also like to receive feedback (positive or negative) on articles or opinion pieces that were recently printed. When responding to a previously printed piece, include the piece's headline and date in your letter's first or second sentence.
- Letters to the editor should be short (four to six one- or two-sentence paragraphs), focus on only one topic, and use common terms. If you need to use an uncommon word, you also need to explain it clearly. If your topic requires more than a short letter, you could also submit an "op-ed" column. This piece should be 10 to 15 three- or four-sentence paragraphs. Again, review the articles in the paper you are targeting.
- Provide your work and home phone numbers to the newspaper. If they cannot easily reach you, they probably won't print your letter.

Creating a Newsletter

A newsletter is a great way to keep people informed of your progress, report recent events and monitoring results, and summarize what was accomplished at each of your meetings for those who could not attend. There are many software packages available that can help you design your own newsletter. If you want people to read your newsletter, keep it short and simple. Most people will not read a long block of uninterrupted text. Always use lots of white space around your text, and break up large blocks of text with pictures or graphics wherever possible.

The Limberlost Experience – Newsletter

The Limberlost Pilot Focus Area likes to include the following types of information in its newsletter:

- Dates of Upcoming Events: (Local Programs)
- Dates of Workshops: (Statewide Programs)
- Cover Story: Photograph of an interesting subject (Feature story about a bird, wetland, dragonfly, etc.)
- Issue Articles
- People involved with wetlands, landowners, members, volunteers, etc.
- Historic Indiana Wetlands: Kankakee, Black Swamp, etc.
- Limberlost State Historic Site
- Gene Stratton-Porter

4 The Commercial Review Monday, August 24, 1998 Portland, Indiana

Wetlands help curb mosquito population

editor's mailbag

To the editor:

Do you want to reduce the mosquito population? Restore a wetland.

I have always been told that the mosquito predators would increase in a restored wetland, and they would offset any increase in mosquito populations. The facts are conclusive. Restored wetlands on the Loblolly Marsh Wetland Preserve have had no detectable mosquito larvae during all this wet period. Other un-restored areas, including cropland, had many mosquito larvae too numerous to count.

It's easy to understand.

Restored wetland: Dragonflies, too numerous to count; damselflies — too numerous to count; water striders — numerous; backswimmers — too numerous to count: mosquitos — zero.

Temporary (un-restored) wetland: Mosquitos — too numerous to count; dragonflies — few; damselflies — few; water striders — few; backswimmers — few.

Would you like to assist with the next mosquito study on the Loblolly Marsh Wetland Preserve? Please write: Limberlost Swamp Remembered, P.O. Box 603, Geneva, IN 46740.

Kenneth Brunswick,
Director
Limberlost Swamp Remembered

Fair thanks

To the editor:

We would like to thank all of the Jay County Extension Homemakers for their help in the Women's Building at the 1998 Jay County Fair. Thanks to Rosie Grapner, Chris Dugan, Betty Daniels, the Coleman sisters and John Knipp for their valuable assistance.

A special thanks to the following demonstrators: Shirley Dollar; on "Gift Wrap with Love,"; Lisa Barnett from Tyson Mexican Original; Dwane Ford and Ken Brunswick on "Wetlands"; Pat Bricker and Jill Twigg from All-ways Just for You," Martha Ellen Geesaman on "Making Sock Rugs," and Tim Elherding from Swiss Way Cheese in Berne.

The generosity of the following merchants who gave toward our door prizes was very much appreciated: Bob May Insurance, Richard's Restaurant, Super Car Wash, Fishers, Tom & Rod's Tap, LoBill, Truc Value, Lee's Famous Recipe Chicken, Pizza Hut, State Farm Insurance, Williamson's Chairs, Funk's Honey, Jay County REMC, Wal-Mart, B&K Travel, Burger King, Jay County Hospital, Ritz Theatre and Tyson Mexican Original, all from the Portland area. From Pennville — the Pennville Restaurant and Pampered Chef. From Fiat — Country Corner Coiffures. From Berne — Swiss Way Cheese. And from Dunkirk — Huck's Pizza, Gaunt Jewelry, Indiana Glass House, Ludwig's Grocery and Mannix Greenhouse.

We are already looking forward to seeing all of you at the 1999 Jay County Fair.

Thanks again to all,
Phyllis Johnson and
Helen Gillum, co-chairs,
Women's Building at
Jay County Fairgrounds

The Limberlost Experience – The Unpopular Mosquito

Limberlost Focus Area Coordinator Ken Brunswick describes how he came to submit a letter to the editor concerning mosquitoes.

Mosquitoes are the most unpopular insects in the Limberlost. People view them as a nuisance and as carriers of disease, and they also associate them with wetlands. I knew we would have to address this issue as part of our restoration process.

As we surveyed the drained wetlands that we planned to restore, I was almost always followed around by mosquitoes. These were drained wetlands that contained temporary water whenever it rained–prime mosquito habitat.

About two years later, while working in the same wetlands (now they were permanent, functioning wetlands), I noticed a lack of mosquitoes. I wondered if it was possible that restoring marsh wetlands reduced mosquitoes. I then conducted a small study of wetlands to determine whether mosquito populations decrease or increase when a wetland is restored. I chose seven drained wetland areas that I knew would probably be restored in the near future. After a big rainfall, I checked the sites for the presence of mosquito larvae. After a site would be restored, I would check it again for mosquito larvae after the first big rainfall and after subsequent rainfalls. Before restoration, all seven sites harbored mosquito larvae after heavy rains. To date, six of the sites have been restored, and although I did find mosquito larvae present at some of the sites during the first post-restoration check, I did not find any larvae during subsequent visits (once mosquito predators became established in the wetland).

To me, this was an amazing discovery! Permanent, functioning wetlands appeared to actually cause a decrease in the mosquito population! I wrote a letter to the editor describing my discovery.

In hindsight, I could have improved the article, but it definitely made the points I wanted to get across to a wide audience. The success of the letter also led to the development of a Mosquito Fact Sheet that the DNR is now distributing as part of the Indiana Wetlands Conservation Plan project.

Cleanup Projects

A wetland cleanup can make improvements in the quality of the water and wildlife habitat a wetland provides. The true value of a cleanup project, however, is that it is a valuable tool for educating the community and getting community members involved in pursuing future wetland conservation projects. Remember that a cleanup is only a temporary solution. If the community is using your wetland as a trash dump, a community education program may be necessary to stop the problem.

Concentrate on the source of the problem. Your group will need to identify the key impacts on your wetland. If excessive sediment is reaching the wetland, a dredging project is not the long-term answer. You might want to contact nearby construction sites and make sure they obey all local and state erosion and sediment control laws. Better yet, invite the construction workers to the wetland for a tour and educate them about potential negative impacts of human activities on wetland functions and values. If polluted storm water is impacting the wetland, focus on working with local planners to improve storm water management. Perhaps regional storm water retention ponds could be constructed to capture and filter polluted runoff.

Recognition Programs

One of the easiest ways to raise public awareness of the value of wetlands is to recognize the excellent work of people within the community who are already wetland stewards. Start an awards program that recognizes people who conserve, restore, or create wetlands on their property. Design an application form and select a committee to judge submissions. Advertise the program as a contest. Winners can receive prizes, such as a sign for their yard that indicates a "wetland-friendly yard." Make certificates, posters, T-shirts, or other items to give as additional prizes. You may want to get all the winners in the community together for an awards ceremony. Be sure to invite the media.